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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,124	01/02/2002	Ronald John Vanderhelm	034300-192	7461

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EXAMINER	
LE, DANH C	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/038,124	VANDERHELM, RONALD JOHN	
	Examiner	Art Unit	
	DANH C. LE	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-12,14-20 and 22-31* is/are rejected.

7)☒ Claim(s) *5,13,21 and 32* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. **Claims 1, 2, 4, 9, 11, 12, 17, 20, 22, 25, 27, 30 are rejected under 35 U.S.C. 102(a) as being anticipated by Nelson (US 6,404,393).**

As to claim 1, Nelson inherently teaches a core wireless engine design (figure 1, 108 and its description) comprising:

a transceiver (figure 2, 210);

a microprocessor (figure 2, 230); and

a standardized interface arrangement (**108 which has 3 different types of interface**, col.3, lines 45-46), the standardized interface arrangement adapted to be interconnected to a variety of types of host interfaces (hosts 120, 135) implementing a plurality of bus standards (bus 10, another bus form peripheral device to peripheral component 100), each host interface designed to interface with the standardized interface arrangement (108 has reception interface X-jack or RJ11 or RJ-45 or wire-line connector).

As to claim 2, Nelson teaches the core wireless engine design of Claim 1 wherein the core wireless engine is designed to fit into a variety of form factor units (col.3, line 33-col.4, line 9).

As to claim 4, Nelson teaches the system including the core wireless engine design of Claim 1, further including a host interface interconnected to the standardized interface arrangement (col.3, line 33-col.4, line 9).

As to claim 9, Nelson teaches the core wireless engine design of Claim 2, wherein the core wireless engine is housed in a form factor that is less than 5 millimeters thick (col.5, lines 21-33).

As to claim 11, Nelson teaches a core wireless engine design comprising:

a transceiver (figure 2, 210);

a microprocessor (figure 2, 230); and

a standardized interface arrangement, the standardized interface arrangement adapted to be interconnected to a variety of types of host interfaces implementing a plurality of bus standards, each host interface designed to interface with the standardized interface arrangement (see cited on claim 1).

wherein the core wireless design is adapted to fit into a variety of form factor units (col.3, line 33-col.4, line 9).

As to claim 12, Nelson teaches the system including the core wireless design of Claim 11 wherein the system further includes a host interface (figure 1, 120).

As to claim 17, the limitation of the claim is the same limitation of claim 9; therefore, the claim is interpreted and rejected as set forth as claim 9.

As to claim 19, Nelson teaches a core wireless engine (figure 1, 108 and its description) design comprising:

a transceiver (figure 2, 210);

a microprocessor (figure 2, 230); and

a standardized interface arrangement, the standardized interface arrangement adapted to be interconnected to a variety of types of host interfaces implementing a plurality of bus standards, each host interface designed to interface with the standardized interface arrangement.

wherein the core wireless engine design is adapted to fit into a variety of form factor units including PCMCIA and Compact Flash cards (col.3, line 33-col.4, line 9).

As to claim 20, Nelson teaches the core wireless engine design of Claim 19 wherein the core wireless design is further adapted to fit within the form factor of a mini PCI card (col.3, line 45).

As to claim 22, Nelson teaches the core wireless engine design of Claim 19 wherein the standardized interface arrangement is adapted to be interconnected to a variety of host interfaces (figure 1, 120, 125, 135).

As to claim 25, the limitation of the claim is the same limitation of claim 9; therefore, the claim is interpreted and rejected as set forth as claim 9.

As to claim 27, Nelson teaches a method of producing a wireless modem unit (figure 1, 108 and its description), comprising:

selecting a core wireless design from a number of core wireless engine designs, each core wireless engine design having a standardized interface arrangement adapted to be interconnected to a variety of types of host interfaces implementing a plurality of bus standards, each host interface designed to interface with the

standardized interface arrangement.

and the core wireless design adapted to fit into a variety of form factor units;

selecting a host interface and form factor unit from the variety of host interfaces and variety of form factor units and combining the selected core wireless design and selected hot interface and form factor unit to produce a wireless modem unit (col.3, line 33-col.4, line 9).

As to claim 25, the limitation of the claim is the same limitation of claim 9; therefore, the claim is interpreted and rejected as set forth as claim 9.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 3, 6-8, 10, 15, 16, 18, 23, 24, 26, 28, 29, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson in view of Lazzarotto (US 6,782,245).

As to claim 3, Nelson teaches the core wireless engine design of Claim 2, wherein the core wireless engine is designed to fit within PCMCIA. Nelson fails to teach Compact Flash cards. Lazzarotto teaches Compact Flash cards (col.13, lines 16-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Pitsoulakis into the system of Lazzarotto

in order to enhance the system performance of the embedded antenna a type II PCMCIA card.

As to claim 6, Nelson and Lazzarotto teaches the core wireless engine design of Claim 1, wherein the variety of host interfaces includes a PCMCIA interface and a Compact Flash card interface (col.13, lines 16-45).

As to claim 7, Nelson and Lazzarotto teaches the core wireless engine design of Claim 1, wherein the variety of host interfaces includes a PCMCIA interface as well as a Compact Flash interface (col.13, lines 16-45).

As to claim 8, Nelson and Lazzarotto teaches the core wireless engine design of Claim 2, wherein the variety of form factors includes a Compact Flash form factor (col.13, lines 16-45).

As to claim 10, Nelson and Lazzarotto teaches the design according to Claim 1 wherein the core wireless engine is less than 36 millimeters wide and 41 millimeters high (col.13, lines 16-45).

As to claim 15, 16, 18; the limitations of the claims are the same limitations of claims 7, 8, 10; therefore, the claims are interpreted and rejected as set forth as claims 7, 8, 10.

As to claim 23, 24, 26; the limitations of the claims are the same limitations of claims 7, 8, 10; therefore, the claims are interpreted and rejected as set forth as claims 7, 8, 10.

As to claim 28, 29, 31; the limitations of the claims are the same limitations of claims 7, 8, 10; therefore, the claims are interpreted and rejected as set forth as claims 7, 8, 10.

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson in view of Pitsoulakis (US 7,092,375).

As to claim 14, Nelson teaches the system of Claim 11, wherein the core wireless engine design. Nelson fails to teach further the standardized interface arrangement includes a standardized set of registers. Pitsoulakis teaches the standardized interface arrangement includes a standardized set of registers (Pitsoulakis figure 9, 902).. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Pitsoulakis into the system of Nelson in order to receive signals such as data, control and serial/detonator.

Response to Arguments

On page 9 paragraphs 1 and 2 of the Applicant 's response, the Applicant argues that Nelson did not disclose a standardized interface arrangement as claimed.

In response, the Examiner believes that Nelson teaches a standardized interface arrangement (108 which has 3 different types of interface), the standardized interface arrangement adapted to be interconnected to a variety of types of host interfaces (hosts 120, 135) implementing a plurality of bus standards (bus 10, another bus form peripheral device to peripheral component 100), each host interface designed to interface with the standardized interface arrangement (108 has reception interface X-jack or RJ11 or RJ-45 or wire-line connector).

Allowable Subject Matter

Claims 5, 13, 21, 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

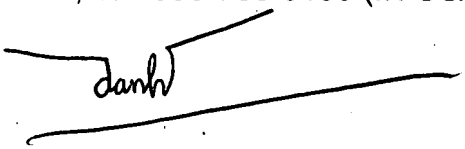
As to claims 5, 13, 21, 32, the teaching of above prior arts either alone or in combine fails to teach further comprising a field programmable gate array and the host interface is positioned within the field programmable gate array or teach fitting within a Handspring Visor Springboard card or the form factor of a mini PCI card and a printed circuit board that is offset from tea centerline that defines the thickness of a form factor unit in which the core wireless engine design is housed

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C. LE whose telephone number is 571-272-7868. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



September 20, 2007
DANH LE
PRIMARY EXAMINER